

**REMARKS**

Claims 1, 15, and 18 have been amended to more particularly point out and distinctly claim the present invention. Claim 1 specifically recites that the combination valve is unitary (see, for example, Figs. 3 and 4 and the description thereof in the Specification). In claim 12, "cover" was changed to "lid" to provide consistency of language. Claim 15 recites that the combination valve is annular and claim 18 recites that the combination valve has an annular body. The indefiniteness noted with respect to claim 11 has been obviated by amending claim 11 to depend from claim 9, rather than claim 5. Claims 1-18 remain in the application for consideration.

The present invention pertains to a unitary combination check and bypass valve for use in a filter assembly. The filter assembly includes a housing open at one end, an annular filter media/core assembly, and an end plate closing the open end of the housing. The end plate has first and second inlet openings and an outlet opening. The check valve portion of the combination valve performs an anti-drain back function and the bypass portion of the combination valve enables fluid to bypass the annular filter media/core assembly in the filter assembly in use. The unitary combination valve is disposed and retained between the annular filter media/core assembly and end plate in use. As described in the Specification, the present invention materially reduces the number of parts need for a line of filters. Filter sizes can be consolidated and the complexity of internal components can be reduced significantly. The unique end cap design and the orientation of the openings therein is a facilitating factor in both construction and operation of the filter assembly. The construction of the combination check valve and bypass valve and the cooperation of the combination check valve and bypass valve with the end plate contribute to easier assembly and enhanced performance. The respective circles of openings in the end plate are fairly close to one another. The combination valve is

constructed so that it can be retained in place against the end plate by the core 16 of the filter means by contact between the two circles of openings. This arrangement seals fluid flow through one circle of openings from the fluid flow through the other circle of openings. Tolerances need not be tight to obtain the sealing results desired.

The present invention is not taught or suggested by Silverwater. Silverwater does not anticipate any of the eighteen claims in this application. Clearly the disc 11 is not a unitary combination valve as recited in claims 1-18-rather it is a spring disc valve that performs only a check valve function. When the disc 11 is moved away from the surface 14, passage 16 is opened to flow of fluid from the inlet passage 4 through passage 7 to passage 16 and thence to space 17 between the core 41 of the primary filter element 40 and the secondary filter element 50. A separate member is used to perform the bypass function, namely, the relief valve assembly, which includes the disc 80. The separate disc valves 11 and 80 are entirely different in construction and function from the applicants' unitary combination valve.

The interpretation of Silverwater by the Examiner distorts Silverwater. For example claim 1 calls for a unitary combination valve 26 having a first portion 28 that cooperates with first inlet openings 30 in the end plate 18 and a second portion 32 that cooperates with the second inlet openings 34 in the end plate 18. The claim recites that the second portion 32 has more resistance to fluid flow than the first portion 28. Reference is made by the Examiner to column 9, lines 53-55, however, these lines merely recite that the discs can be uniform in thickness throughout or can vary in thickness, thinner at the center than at the edge, to give improved flexing and sealing. There is no suggestion whatsoever in Silverwater that the disc valve 11 performs both the check (or anti-drain back) and bypass functions. Claim 1 is clearly patentable over Silverwater and should be allowed. Independent claims 15 and 18 should be allowed together with claim 1 for the reasons noted with respect to claim 1.

With respect to the rejection of claims 2 and 17, what element in Silverwater is the “spring disposed between the top of the annular filter media/core assembly and the inside of the housing for biasing the annular filter media/core assembly toward the end plate to retain the combination valve in place”. The citation to column 5, lines 39-40 does not refer to a spring as recited in the claims, rather it states “The pressure-sensitive annular spring disc valve 11 fits snugly on its outer periphery against the side wall”. Disc 11 does not function to bias the filter media 40. Claims 2 and 17 distinguish over Silverwater and are patentable.

Regarding claims 3, 16, and 18, the rejection clearly is faulty for the reasons noted with respect to claim 1. The disc 11 of Silverwater is not a unitary combination valve. The reference by the Examiner to column 9, lines 33-55 of Silverwater in no way suggests the claimed combination valve. The allowance of claims 3, 16, and 18 is urged.

As to claim 5, the Examiner is asked to specifically identify “the inclined surface” on the end plate portion 13 of Silverwater. Passage 7 is in the ring 8, and appears to be transverse to the longitudinal axis of the housing. Orifices 10 are disposed in a transverse surface of the ring 13. There is no suggestion in Silverwater of the first and second inlet openings, each comprising a plurality of openings arranged generally in a circle around the axis of the filter assembly, with the two circles being concentric to one another, and with the annular filter media/core assembly urging the combination valve against the end plate in the region between the two circle of openings. The Examiner appears to have misinterpreted the clear language of the claim. Claim 5 patentably distinguishes over Silverwater and should be allowed.

As for claim 11, the disc 11 of Silverwater has only one portion. It is an annular disc. Therefore, the disc 11 does not have a second portion that has a surface that engages the end plate and a surface engaging the central core, as required by claim 11. Silverwater fails to

plate and a surface engaging the central core, as required by claim 11. Silverwater fails to suggest the subject matter of claim 11.

As for claim 12, the manifold 27 of Silverwater bears no relation to the claimed lid having an outwardly extending recess for receiving a gasket. Claim 12 is patentable over Silverwater.

There is no suggestion in Silverwater for the claimed complementary retaining means defined in claims 13 and 14. The allowance of claims 13 and 14 is urged.

Given the clear failure of Silverwater to anticipate the independent claims 1, 15, and 18, claims 1, 15 and 18 should be allowed. It is submitted that each of the dependent claims is patentable, together with the claims from which they respectively depend.

Favorable reconsideration and allowance of the present application are solicited.

Respectfully submitted,

Date: April 25, 2006


By: \_\_\_\_\_

  
Seymour Rothstein  
(Reg. No. 19,369 )

OLSON & HIERL, LTD.  
20 North Wacker Drive, 36th Floor  
Chicago, IL 60606  
(312) 580-1180

**CERTIFICATE OF MAILING**

I hereby certify that this paper and its attachments are being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 25, 2006.

  
Seymour Rothstein